28 October, 1981

~~[Arthur C. Clarke material for Science Digest]~~

IN PRAISE OF ARTHUR C. CLARKE

When I was in high school I knew that I was interested in the other planets and I knew that rockets had something to do with getting there. But I had not the foggiest notion about how ~~they~~ rockets worked or how their trajectories were determined. Then I came upon an advertisement for a book called Interplanetary Flight by one Arthur C. Clarke. You must remember that at this time there was ~~no~~ hardly any respectable non-fiction literature on the subject. I sent away my money and breathlessly awaited the arrival of Interplanetary Flight. It was a modest looking book, beautifully written, its stirring last ~~two paragraphs~~ are of great relevance ~~can be read with great advantage~~ today. But the part about it that was most striking for me was the discussion of the gravitational potential wells of planets and the appendices which used differential and integral calculus to discuss propulsion mechanisms and staging and interplanetary trajectories. The calculus, it slowly dawned on me, was actually useful for something important, and not just for intimidating high school algebra students. The flyleaf informed me that Mr. Clarke was connected with something called The British Interplanetary Society. Back copies of the journal of the BIS were stocked in the rundown Manhattan offices of the still fledgling American Rocket Society (later the American Institute of Aeronautics and Astronautics), and through the kindness of Billy Slade, the Society's secretary, I was able to make off with some back numbers filled with marvellous ideas, including an electrical propulsion scheme by Clarke, very similar to Gerard O'Neill's ~~present~~ "mass driver." As I look back on it, Interplanetary Flight was a turning point in my scientific development and I would like to take this opportunity to publicly thank Arthur for this splendid book.

Since then I've had many opportunities of meeting with him. Arthur has introduced me both to the composer of "Tubby the Tuba" and to the producer of "2001: A Space Odyssey." We attended the New York World's Fair of 1964 together. I can remember ~~me~~ being very annoyed at a free film offered by the Moody Bible Institute claiming that the reproductive behavior of the California grunion was proof of divine intervention, when it could so easily be understood in terms of natural selection. ~~When~~ I complained to a cherubic usher who ~~without a doubt was not~~ undoubtedly had limited responsibility for the film's mystical orientation, but Arthur chided me gently: "It's not as if we had paid admission, ~~for the film.~~" he reminded me.

I may have been of some little help to Arthur over the years, for example, ~~I helped resolve a critical plot issue in~~ with the end of the movie 2001; ~~some of his~~ and the idea in such stories ~~such~~ as "A Meeting with Medusa" ~~have been inspired, so he tells me, by some of my scientific speculations; and I've~~ sent him an occasional Viking or Voyager photograph ~~-- for example, of the perfectly natural looking surface of Iapetus~~. But what Arthur has done for ~~my intellectual development~~ me is vastly greater.

INSERT INTO EARLIER:

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(In ~~Around~~ New Jersey high schools around 1950 at any rate, integrals were considered not so much mathematical conveniences ~~or useful tools,~~ as objects of religious awe.)

~~I wish Arthur a long and fruitful continuation of his extraordinary career.~~

INSERT:

The very existence of ~~something called the~~ a British Interplanetary Society helped to convince me that the subject was not entirely disreputable, as almost all my friends and acquaintances were fond of suggesting ~~to me.~~

~~INSERT:~~

Through his non-fiction books and his science fiction stories and novels, his invention of the communications satellite, his work in more finely honing the British Interplanetary Society, and through his classic motion picture, Arthur has done an enormous global service in preparing the climate for a serious human presence beyond the Earth. I hope that the governments of our epoch will have the sense to continue making Arthur's dream -- shared by so many of us -- a reality.

INSERT:

His defense of reason against the clamors of superstition,

Carl Sagan
Cornell University
Ithaca, New York

at bottom of first page:

Carl Sagan is David Duncan Professor of Astronomy and Space Sciences and Director of the Laboratory for Planetary Studies at Cornell University. His television series, COSMOS, is the most widely watched series in the history of American public broadcasting,

Add: And his book, also callsed Cosmos has been on the New York Times bestseller list for more than a year.